

orientation during wafer processing at elevated temperatures between approximately 1000 °C to 1400 °C; and

- c) an arcuate lower grooved portion for receiving the lower area of the semiconductor wafers, wherein at least a part of the lower area of each of the semiconductor wafers in said plurality of slots contacts the lower arcuate grooved portion such that the lower arcuate grooved portion substantially conforms to the at least a part of the lower area of the semiconductor wafers that contact the arcuate lower grooved portion and which supports the weight of the semiconductor wafer positioned thereon.

11. (Amended) A semiconductor wafer boat comprising:

- a) a first end and a second end;
- b) a plurality of slots positioned between the first and second ends for receiving semiconductor wafers therein, the semiconductor wafers being substantially circular and having an upper area and a lower area, each of the slots comprises first and second upper support guides to maintain the semiconductor wafers in a vertical orientation during wafer processing at elevated temperatures between approximately 1000 °C to 1400 °C;
- c) an arcuate lower grooved portion for receiving the lower area of the semiconductor wafers, wherein at least a part of the lower area of each of the semiconductor wafers in said plurality of slots contacts the lower arcuate grooved portion such that the lower arcuate grooved portion substantially conforms to the at least a part of the lower area of the semiconductor wafers that contact the arcuate lower grooved

portion and which supports the weight of the semiconductor wafer positioned thereon; and

- d) at least one window positioned not more than 10 mm from the first and second ends of the boat.